

**United States Patent** [19]  
**Kelderman**

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[54] **TRACK SYSTEM FOR VEHICLES**

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**Related U.S. Application Data**

[63] **Continuation-in-part of Ser. No. 165,641, Dec. 13, 1993,**  
**abandoned.**

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[52] **U.S. Cl.** 305/24; 305/23; 305/29;  
180/9.44

[58] **Field of Search** 305/15, 21, 23,  
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9.21, 9.26, 9.44

[56]

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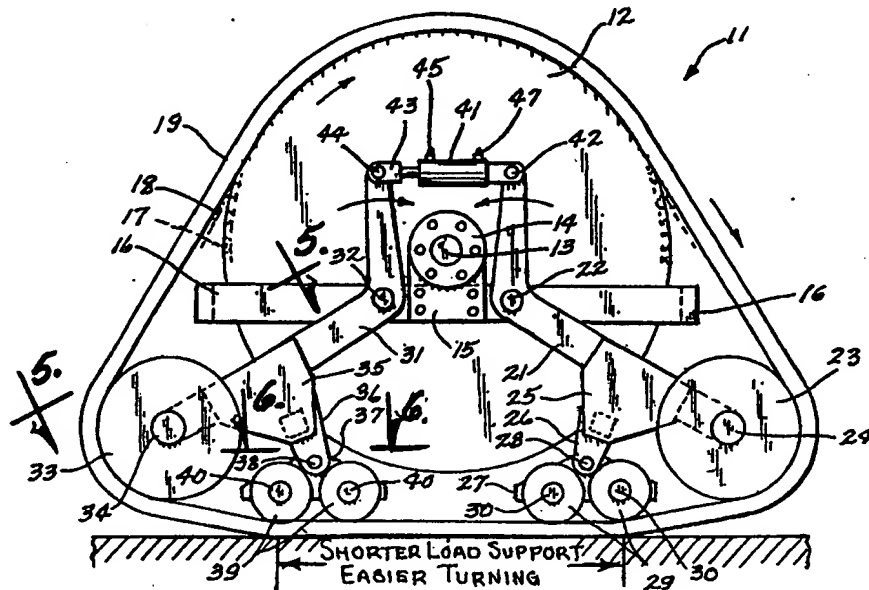
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[57]

**ABSTRACT**

A track suspension system for a vehicle having a frame and a continuous flexible track. A drive wheel is attached to the frame for engaging and driving the continuous flexible track. A leading idler arm is pivotally attached to the frame on each side thereof and a leading idler wheel is rotatably mounted for engagement with the track. A trailing idler arm is provided on each side of the vehicle and is pivotally attached to the frame and a trailing idler wheel engagement with the track is rotatably mounted to one end of each idler trailing arm. A leading mid-roller assembly engagement with the track is operably attached to the leading idler arm and a trailer mid-roller assembly is in engagement with the track and is attached to the trailing idler arm. A cushioning device interconnects the leading and trailer idler arms for providing shock absorbing function. A valve system is provided for releasing all of the pressure on the leading and trailing idler arms so that all of the weight of the tractor is on the mid-roller assembly, thereby facilitating easier turning. The valve system is also operable to put leading and trailing idler arms in either a cushioning mode for use in the fields or travel down the highway or into a non-cushioning mode for use in very soft fields.

16 Claims, 4 Drawing Sheets



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